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In the Claims

1-48. (Canceled)

1 49. (New) A digital micro-mirror device (DMD) format conversion system for
2 outputting a stereoscopic encoded optical signal in a format readable within a display
3 system employing a DMD and a color wheel, said DMD format conversion system
4 comprising:
5 a 3D data formatter for receiving an input signal having stereoscopic image
6 information with an input frame rate and generates an output signal comprising
7 stereoscopic image information and control information having a self synchronized
8 output frame rate independent of and decoupled from the input frame rate;
9 a DMD data formatter for receiving the output signal having stereoscopic image
10 information and control information from the 3D data formatter and for outputting a
11 DMD output signal having stereoscopic image information and control information,
12 wherein the DMD output signal having stereoscopic image information
13 and control information, including a color wheel control signal indicative of
14 rotation rate and output digital micro-mirror device data indicative of micro-
15 mirror switching rates, wherein said color wheel control signal and output digital
16 micro-mirror device data are synchronized based on the output frame rate
17 generated by the 3D data formatter;
18 said digital micro-mirror device data formatter including
19 a dual port memory controller that converts the output signal having
20 stereoscopic image information and control information from the 3D data
21 formatter, with a full color image format, at the output frame rate into an image

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22 stream having serial individual color images synchronized to the color wheel
23 control signal based on the output frame rate
24 a memory device;
25 a DMD data converter for formatting from the image stream into
26 output DMD data readable by a digital micro-mirror chip; and
27 a micro-controller for controlling the dual port memory controller based on the 3D
28 format.

1 50. (New) The DMD format conversion system as in claim 49, wherein said self
2 synchronized output frame rate is set or selected to reduce appearance of flicker.

1 51. (New) The DMD format conversion system as in claim 49, wherein the output
2 signal of the 3D data formatter is color sequential stereoscopic data.

1 52. (New) The DMD format conversion system as in claim 49, wherein the output
2 signal of the 3D data formatter is frame sequential stereoscopic data.

1 53. (New) A DMD projection system comprising:
2 the DMD format conversion system as in claim 49;
3 an illumination source including a lamp for transmitting light to condensing
4 optics, light from said condensing optics being transmitted to a rotating color wheel, the
5 rotating color wheel coupled to the DMD data formatter for receiving color wheel control
6 signals indicative of rotation rate synchronized based on the output frame rate generated

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7 by the 3D data formatter;
8 a digital micro-mirror chip for receiving the output DMD data and reflecting,
9 from micro-mirrors of the digital micro-mirror chip, light received from said color wheel;
10 and
11 projection optics for projecting light reflected from said digital micro-mirror chip.

1 54. (New) The DMD projection system as in claim 53, wherein said color wheel
2 includes a 3D encoder system synchronized based on the output frame rate generated by
3 the 3D data formatter.

1 55. (New) A stereoscopic viewing system comprising the DMD projection system as
2 in claim 54 and an optical decoder for allowing a viewer to perceive stereoscopic images

1 56. (New) The stereoscopic viewing system as in claim 55, wherein the optical
2 decoder comprises passive polarizing lenses having one polarization state corresponding
3 to one eye and another polarization state corresponding to another eye.

1 57. (New) The stereoscopic viewing system as in claim 55,, wherein the optical
2 decoder comprises active shutter glasses.